CLAIMS:

What is claimed is:

1. A method for adjusting the rate of data transfer between a high-speed multi-channel tape drive and an network interface, comprising:

determining a maximum throughput capability of the network interface;

selecting a number of active data channels in the high-speed tape drive, wherein the number of active data channels is selected to match tape drive throughput to the maximum throughput capability of the network interface; and

responsive to selecting a number of active data channels in the tape drive, enabling the selected number of active data channels and disabling a remainder of the data channels.

2. The method in claim 1, further comprising:

marking the tape cartridge to identify the method used to write data, wherein the marking step includes storing information of which channels were selectively enabled or disabled during the write process.

3. The method in claim 2, wherein the information of which channels were selectively enabled or disabled during the write process is written into the media information region of the tape cartridge.

4. The method in claim 2, wherein the information of which channels were selectively enabled or disabled during the write process is written into a radio frequency identification chip in the tape cartridge.

5. The method in claim 1, wherein adjusting the rate of data transfer is performed dynamically.

6. The method in claim 1, wherein the high-speed tape drive comprises a single head system using a number of data channels.

7. The method of claim 1, wherein the active data channels are selectively enabled and disabled as a group.

8. The method of claim 1, wherein the active data channels are selectively enabled and disabled one channel at a time.

9. The method of claim 1, wherein the high-speed tape drive comprises a multi-head system, each using a number of data channels.

10. The method of claim 9, wherein selecting the number of active data channels to be enabled and disabled in a multi-head system is performed on a tape head basis.

11. The method of claim 9, wherein selecting the number of active data channels to be enabled and disabled in a

multi-head system is performed on a combination of channel and tape head basis.

12. A system for adjusting the rate of data transfer between a high-speed multi-channel tape drive and an network interface, comprising:

determining means for determining a maximum throughput capability of the network interface;

selecting means for selecting a number of active data channels in the high-speed tape drive, wherein the number of active data channels is selected to match tape drive throughput to the maximum throughput capability of the network interface; and

responsive to selecting a number of active data channels in the tape drive, enabling means for enabling the selected number of active data channels and disabling a remainder of the data channels.

13. The system according to claim 12, further comprising:

marking means for marking the tape cartridge to identify the method used to write data, wherein the marking step includes storing information of which channels were selectively enabled or disabled during the write process.

14. The system according to claim 13, wherein the information of which channels were selectively enabled or disabled during the write process is written into the media information region of the tape cartridge.

15. The system according to claim 13, wherein the information of which channels were selectively enabled or disabled during the write process is written into a radio frequency identification chip in the tape cartridge.

16. The system according to claim 12, wherein adjusting the rate of data transfer is performed dynamically.

17. The system according to claim 12, wherein the high-speed tape drive comprises a single head system using a number of data channels.

18. The system according to claim 12, wherein the active data channels are selectively enabled and disabled as a group.

19. The system according to claim 12, wherein the active data channels are selectively enabled and disabled one channel at a time.

20. The system according to claim 12, wherein the high-speed tape drive comprises a multi-head system, each using a number of data channels.

21. The system according to claim 20, wherein selecting the number of active data channels to be enabled and disabled in a multi-head system is performed on a tape head basis.

22. The system according to claim 20, wherein selecting the number of active data channels to be enabled and disabled in a multi-head system is performed on a combination of channel and tape head basis.